Amendment to the Claims:

1. (Currently Amended) A method for controlling a drive motor [[(20)]] of a positive displacement vacuum pump [[(16)]], the method ~~comprising the following steps~~:

storing a curve [[(32)]] indicating a respective speed n of the drive motor [[(20)]] for inlet pressure values p, ~~wherein~~ the curve [[(32)]] ~~comprises~~ comprising:

[[-]] an upper range [[(34)]] for inlet pressure values p larger than or equal to an upper limit pressure p_1, ~~with~~ a single constant upper speed value n_1 being associated with said upper range [[(34)]], and

[[-]] an alteration range [[(36)]] for inlet pressure values p smaller than the upper limit pressure p_1, ~~wherein~~ in the alteration range different speed values n_v ~~are~~ being associated with the inlet pressure values p[[,]];

determining the inlet pressure value p[[,]];

determining the speed n associated with the determined inlet pressure value p in the curve; [[(32),]] and

operating the drive motor [[(20)]] at the determined speed n.

2. (Currently Amended) The method according to claim 1, ~~characterized in that~~ wherein the curve [[(32)]] comprises a lower range [[(38)]] for inlet pressure values p smaller than or equal to a lower limit pressure p_2, a single constant lower speed value n_2 [[is]] being associated with the lower range [[(38)]], and the alteration range [[(36) is]] being limited to inlet pressure values p larger than the lower limit pressure p_2.

3. (Currently Amended) A method for controlling a drive motor [[(20)]] of a positive displacement vacuum pump [[(16)]], the method comprising ~~the following steps~~:

storing a curve [[(32)]] indicating a respective speed n of the drive motor [[(20)]] for inlet pressure values p, ~~wherein~~ the curve [[(32)]] ~~comprises~~ comprising:

[[-]] a lower range [[(38)]] for inlet pressure values p smaller than or equal to a lower limit pressure p_2, ~~with~~ a single constant lower speed value n_2 being associated with said lower range [[(38)]],

[[-]] an alteration range [[(36)]] for inlet pressure values p larger than the lower limit pressure p_2, ~~wherein~~ in the alteration range [[(36)]] different speed values n_v ~~are~~ being associated with the inlet pressure values p[[,]];

determining the inlet pressure value p[[,]];

determining the speed n associated with the determined inlet pressure value p in the curve; [[(32),]] and

operating the drive motor [[(20)]] at the determined speed n.

4. (Currently Amended) The method according to ~~any one of claims~~ claim 1[[-3]], ~~characterized in that~~ wherein in the alteration range [[(36)]] decreasing speeds n_v are associated with decreasing inlet pressure values p.

5. (Currently Amended) The method according to ~~any one of claims~~ claim 2[[1-4]], ~~characterized in that~~ wherein the upper limit value p_1 ranges between 20 mbar and 1 mbar, and the lower limit value p_2 ranges between 1.0 mbar and 0.005 mbar.

6. (Currently Amended) The method according to ~~any one of claims~~ claim 2[[1-4]], ~~characterized in that~~ wherein the upper constant speed value n_1 ranges between 2,200 and 1,000 rpm, and the lower constant speed value n_2 ranges between 300 and 1,300 rpm.

7. (Currently Amended) The method according to ~~any one of claims~~ claim 1[[-6]], ~~characterized in that~~ wherein the positive displacement vacuum

pump [[(16)]] is a fore vacuum pump arranged upstream of a high vacuum pump [[(14)]], and the inlet pressure p is ~~the~~ a suction-side pressure of the high vacuum pump [[(14)]].

8. (Currently Amended) The method according to ~~any one of claims~~ claim 1[[-7]], ~~characterized in that~~ wherein the curve [[(32)]] is saved in a characteristic diagram storage.

9. (Currently Amended) The method according to ~~any one of claims~~ claim 1[[-8]], ~~characterized in that~~ wherein the drive motor [[(20)]] is an asynchronous motor.

10. (Currently Amended) A positive displacement vacuum pump [[(16)]] comprising:

a drive motor [[(20)]], an inlet pressure sensor [[(24)]] and a drive motor control [[(22)]] for controlling ~~the~~ a speed n of the drive motor [[(20)]] in dependence on the inlet pressure value p determined by the inlet pressure sensor [[(24)]],

~~wherein~~ the drive motor control [[(22)]] ~~comprises~~ comprising a storage for storing a curve [[(32)]] which indicates a respective speed n of the drive motor [[(20)]] for inlet pressure values p of the inlet pressure sensor [[(24)]], ~~wherein~~ the curve [[(32)]] ~~comprises~~ comprising:

at least one of (a)an upper range [[(34)]] for inlet pressure values p larger than or equal to an upper limit pressure p_1, ~~with~~ a single constant upper speed value n_1 being associated with said upper range and (b) a lower range for the inlet pressure values p lower than or equal to a lower pressure limit p_s, a single constant lower speed value n_2 being associated with the lower range; [[(34),]] and

[[-]] an alteration range [[(36)]] for inlet pressure values p smaller than the upper limit pressure p_1 or larger than the lower limit pressure p_s, ~~wherein~~ in the alteration range [[(36)]]

different speed values n_v ~~are~~ being associated with the inlet pressure values p.

11. (Currently Amended) The positive displacement vacuum pump according to claim 10, ~~characterized in that~~ wherein the drive motor control [[(22)]] comprises a processor [[(28)]] which has connected therewith the inlet pressure sensor [[(24)]] and which evaluates ~~the~~ signals ~~of~~ from the inlet pressure sensor [[(24)]].

12. (New) The method according to claim 3, wherein in the alteration range decreasing speeds n_v are associated with decreasing inlet pressure values p.

13. (New) The method according to claim 3, wherein the positive displacement vacuum pump is a fore vacuum pump arranged upstream of a high vacuum pump, and the inlet pressure p is a suction-side pressure of the high vacuum pump.

14. (New) The method according to claim 3, wherein the curve is saved in a characteristic diagram storage.

15. (New) The method according to claim 3, wherein the drive motor is an asynchronous motor.